Dairy Situation

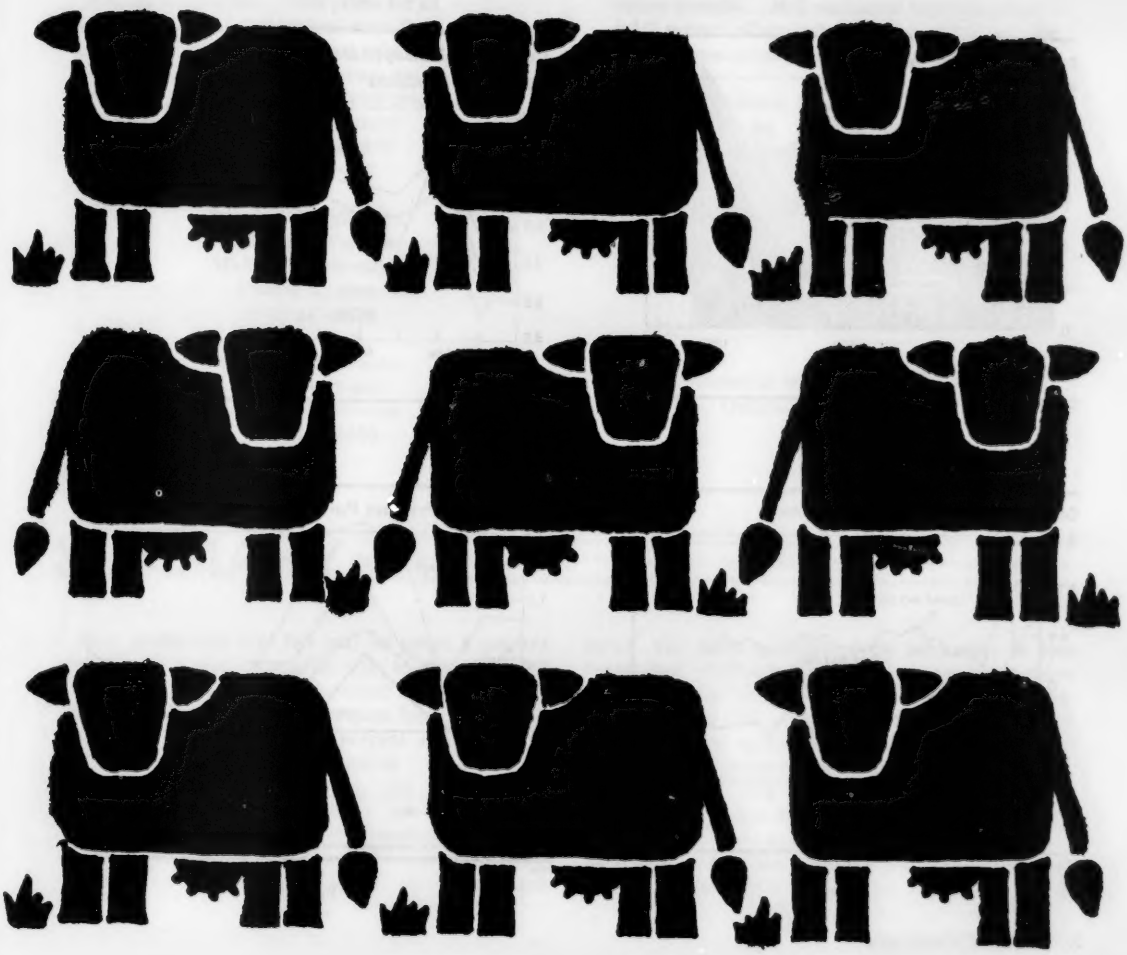
ECONOMICS AND STATISTICS SERVICE

DS-382

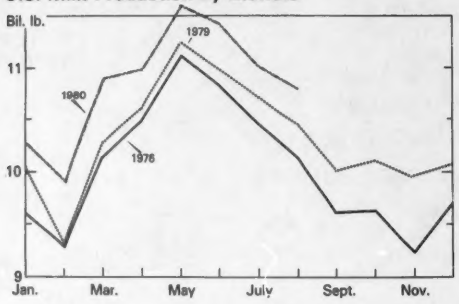
U.S. Department of Agriculture

OCTOBER 1980

Approved by the World Food and Agricultural Outlook and Situation Board



U.S. Milk Production by Months



USDA

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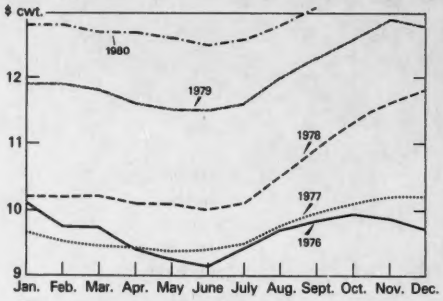
Figure 1

Milk Prices*



*U.S. average price received by farmers for deliveries to plants and dealers.

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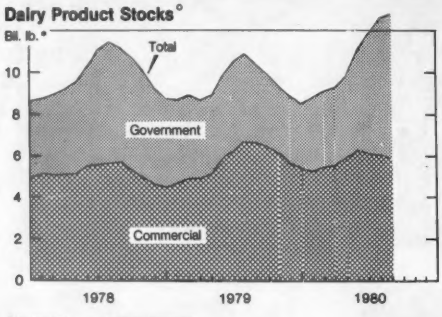
Figure 2

Dairy Product Stocks°



°As of first of month. *Milk equivalent, fat-solids basis.

USDA

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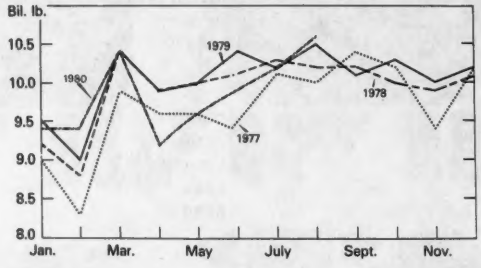
Figure 3

Commercial Disappearance of Milk in All Products*



*Milk equivalent.

USDA

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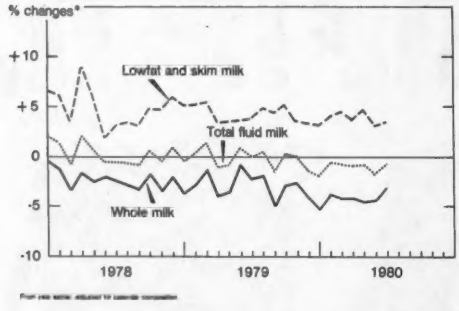
Figure 4

Daily Average Sales of Fluid Milk Items



*From year earlier adjusted for calendar composition.

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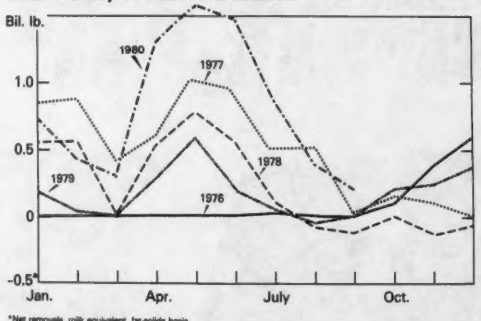
Figure 5

USDA Dairy Product Purchases*



*Net removals, milk equivalent, fat-solids basis.
†Negative figures denote domestic sales exceeded purchases.

USDA

Neg. ESCS 8449-80(10)

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SUMMARY

Milk production this fall will be about 2 percent above a year ago, primarily due to the expanded dairy herd. Thus, total 1980 output will be the largest on record, topping the previous high of 127 billion pounds in 1964, and 3 percent more than in 1979. More favorable demand conditions—a strengthening general economy and higher meat prices—could increase commercial use of dairy products. However, a large supply of milk for manufacturing purposes, large USDA stocks and the Commodity Credit Corporation's (CCC) 105-percent sellback policy will limit potential price advances. In late September, wholesale butter and cheese prices were near the higher support purchase levels, in anticipation of higher CCC prices effective October 1. Farm milk prices and retail dairy product prices will tend to follow these increases in coming months.

July-August milk production was 3.2 percent greater than a year ago. The U.S. dairy herd continued to expand this summer; cow numbers in August were the largest since March 1978 and 1 percent more than last year. Output per cow during July-

August was up 2.2 percent, compared with an average gain of 3.3 percent the previous 12 months. This slowing was due to a decline in milk-feed price relationships and the strong productivity gains made a year ago.

The major uncertainty with respect to production into mid-1981 is the number of milk cows, although it is almost certain to average above year-earlier levels. The apparently large numbers of replacement animals and the mandated April 1, 1981 increase in the support price will encourage expansion. Conversely, expected higher cull cow prices and substantial increases in feed costs may limit the expansion or even cause a downturn in cow numbers. Milk-feed price relationships will not be as favorable as in the past few years, likely inhibiting productivity gains. On balance, milk production gains can be expected to continue during the first half of next year, although the rate of increase is likely to subside.

Due to the very slack supply-demand balance, manufacturing grade milk prices (when adjusted for fat content) failed to reach the April-September support level, although they increased from 58 cents below in April to 17 cents below in September and averaged about 42 cents under. During September, the manufacturing grade milk price was $12.10 per cwt., up 6 percent from last year, while the average price paid for all milk was $13.10, up 6-1/2 percent. Higher support prices, as well as seasonal factors, will cause farm milk prices to strengthen for the rest of 1980 and average about a tenth higher than a year ago during the fall.

On October 1, the support price for manufacturing grade milk was increased to $13.10 per cwt. at 3.67-percent fat (and $12.80 for 3.5-percent fat) for the 1980/81 marketing year. This price must be adjusted on April 1, 1981, to reflect the estimated change in the index of prices paid by farmers.

By late September, wholesale prices of butter and American cheese had increased more than a dime from early April. Wholesale prices of nonfat dry milk were much more stable, while edible dry whey prices were up sharply.

Retail dairy product prices during August were 10.1 percent higher than last year, compared with a 9.5-percent increase in the price of all foods. Retail dairy product prices will continue to rise this fall, due to the recent increases in wholesale prices and seasonal supply-demand factors. For all of 1980, dairy product prices at the grocery store will average about a tenth higher than last year.

Continuing heavy raw milk supplies resulted in 7.5 percent more milk used in the manufacture of dairy products during June-August. Butter production was up 19 percent from a year ago, and American cheese output increased 6.8 percent. The manufacture of other cheese varieties was down 2.7 percent. Meanwhile, commercial disappearance of milk and dairy products was unchanged during July-August. Cheese sales remained languid, while commercial use of butter rebounded.

Industry holdings of dairy products dipped below year-earlier levels this summer. On September 1, commercial stocks of milkfat and solids-not-fat were 12 percent and 3 percent, respectively, below year-earlier levels.

Compared with a year ago, CCC purchased large quantities of dairy products under the price support program during July-September—although Government purchases subsided in August and a small amount of butter was sold back to the industry. In the marketing year just ended, the CCC removed 8.2 billion pounds, milk equivalent, from the market—the largest since 1962. The CCC purchased more than 6 percent of the milkfat and solids-not-fat marketed, up from 1 and 2 percent, respectively, in 1978/79. Net purchase costs (CCC purchases less sales back to the industry for unrestricted use) during 1979/80 totaled approximately $1,275 million.

June-August imports of dairy products were 23 percent less than a year ago on a milk equivalent basis. Cheese imports continued to lag behind last year, while lactose imports were up substantially.

It now appears world milk production in 1980 will be about 1 percent greater than last year. World trade in dairy products has remained buoyant, maintaining relatively high product prices.

DAIRY SITUATION

SITUATION AND OUTLOOK

PRODUCTION

Large Output Gains Continue

Increases in milk production that have prevailed since mid-1979 continued this summer. July-August output increased 3.2 percent from a year earlier, as both greater output per cow and larger cow numbers contributed to higher production. August was the 16th consecutive month of year-to-year gains in milk production. Through the first 8 months of 1980, cumulative milk output was 3.2 percent above last year (on a daily average basis).

The U.S. dairy herd continued to expand during July-August. August cow numbers stood at 10.864 million, the largest total since March 1978 and 109,000 (or 1.0 percent) more than in August 1979. This increase stems primarily from the influx of a large number of replacement heifers indicated in recent cattle inventory reports. In addition, the favorable milk-feed price relationships of the past year along with relatively low slaughter cow prices have probably resulted in a reduced culling rate. Also contributing to the larger cow numbers has probably been the comparatively favorable income conditions for dairying the past couple of years, when compared with other farm enterprises and off-farm employment opportunities.

Output per cow during July-August averaged 2.2 percent more than a year ago, compared with an average gain of 3.3 percent the previous 12 months. This slowing may partially reflect the decline in milk-feed price relationships this summer; the August milk-feed price ratio equaled 1.42, the lowest since July 1977. The smaller increase also was due to the relatively large gains in output per cow during July-August 1979. The heat wave that affected many areas of the country apparently had little impact nationwide on output per cow. Of the 33 reporting States, only seven showed a decrease in output per cow from a year earlier, including Arkansas, Georgia, Mississippi and Oklahoma in drought-affected areas. But, year-to-year increases in States

Milk cows and replacements, 1976-79

Date	Milk cows	Replacement heifers, 500 pounds and over	
		Number	Per 100 cows
	1,000		*Number*
1977			
January 1	11,035	3,888	35.2
July 1	10,977	4,005	36.5
1978			
January 1	10,939	3,896	35.6
July 1	10,801	3,957	36.6
1979			
January 1	10,853	3,936	36.3
July 1	10,734	4,117	38.4
1980			
January 1	10,810	4,166	38.5
July 1	10,832	4,389	40.5

U.S. milk production

Month	1979	1980	Change
	Million pounds		*Percent*
January	10,004	10,260	+2.6
February	9,317	9,917	+6.4
March	10,526	10,881	+3.4
April	10,600	10,941	+3.2
May	11,226	11,609	+3.4
June	10,973	11,409	+4.0
July	10,698	11,019	+3.0
August	10,439	10,786	+3.3
September	10,014		
October	10,108		
November	9,657		
December	10,061		
Total	123,623		

Utility cow prices, Omaha

Month	1978	1979	1980
	Dollars per cwt.		
January	27.59	47.33	47.94
February	29.45	50.81	51.22
March	32.44	52.94	48.80
April	36.94	57.00	45.73
May	39.21	55.51	42.78
June	37.61	50.60	44.06
July	38.09	47.80	43.33
August	37.85	48.33	45.53
September	39.75	49.65	46.56
October	40.46	47.71	
November	39.30	46.49	
December	41.85	46.98	
Average	36.71	50.10	

such as Texas, Florida, and Virginia were tempered, probably due to the extreme heat.

Among the various production regions, July-August milk output ranged from a year-to-year increase of about 7 percent in the Mountain and Pacific regions to declines of around 2 percent in the Southeast and Delta States. Milk production was up in all five of the major producing States—California (7.3 percent), Minnesota (3.5 percent), New York (2.4 percent), Pennsylvania (3.1 percent), and Wisconsin (2.1 percent).

Feed Prices Increase, To be Above a Year Ago

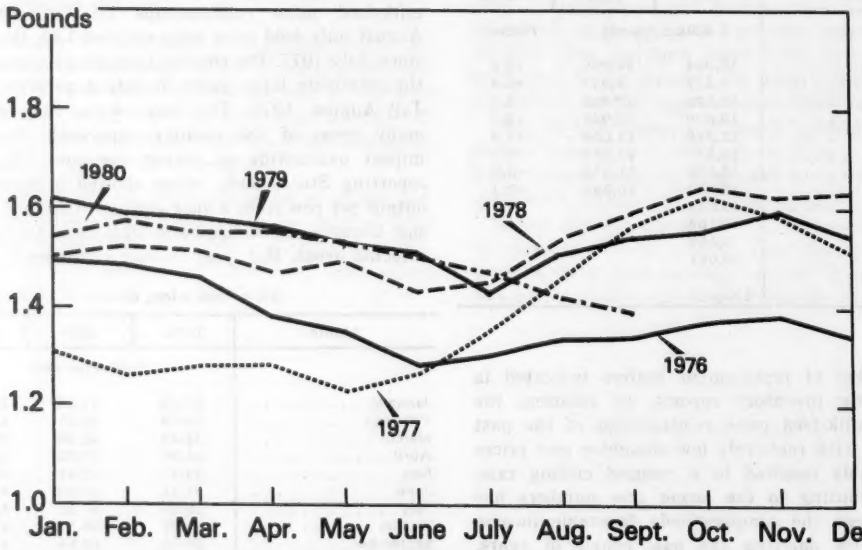
The rather swift runup in feed ingredient prices this summer has been reflected in higher dairy feed prices. The price of 16-percent protein dairy ration stood at $188 per ton during September, up $28 (17.5 percent) from a year ago and $21 from June. These rapid increases, along with more stable farm milk prices, caused the milk-feed price ratio to decline from 1.50 in June to 1.37 during September (figure 7). The September milk-feed price ratio contrasts with the relatively favorable value of 1.54 a year earlier.

Early October prices for No. 2 yellow corn at Chicago were quoted at about $3.35 per bushel, up about 50 cents from last year and 25 cents from mid-July. The strength in feed prices this summer (corn prices at Chicago were in the $3.30-3.50 range for much of August and September) has been due to strong domestic use and high export levels during the

Milk-feed price ratio[1]

Month	1978	1979	1980
	Pounds		
January	1.50	1.62	1.54
February	1.52	1.59	1.57
March	1.51	1.58	1.55
April	1.47	1.56	1.55
May	1.49	1.53	1.53
June	1.43	1.51	1.50
July	1.45	1.43	1.47
August	1.54	1.51	1.42
September	1.59	1.54	1.39
October	1.64	1.55	
November	1.62	1.59	
December	1.63	1.54	
Average	1.53	1.54	

[1] Pounds of 16% protein ration equal in value to 1 pound of milk.



*Pounds of 16% protein ration equal in value to one pound of milk sold to plants and dealers.

USDA Figure 7 Neg. ESCS 40-80(10)

1979/80 crop year, expectations for a sharp drop in production this year, and the prospect of the smallest carryover stocks in 4 years. As of September 1, 1980, this year's corn for grain production was forecast at 6.53 billion bushels, down 16 percent from the record 1979 harvest. This decrease, combined with smaller carryover stocks and expectations of continued strong domestic use and higher exports, means corn prices will remain strong through 1980/1981. Sharp declines in other feed grain crops resulted in a September 1 total feed grain production estimate 16 percent less than last year.

As for the other major dairy ration ingredient, soybean meal prices (44-percent protein, Decatur) were reported at about $225 per ton in early October, up about $25 from a year ago and from mid-July. The strong meal prices have been due to relatively strong demand for livestock feeding along with decreased crushings this summer. Prices of meal will probably decline seasonally this fall, but with a smaller soybean harvest than last year, soybean meal prices are expected to average considerably higher during 1980/81. Because of the anticipated high feed ingredient prices, dairy concentrate ration costs can also be expected to be considerably above year-earlier levels during the next year.

With respect to roughage, alfalfa hay production in the United States on August 1 was forecast to be 13 percent less than a year ago. Output was forecast to be down in Wisconsin (12 percent), Minnesota (22 percent), New York (6 percent), and Pennsylvania (1 percent), but up about 3 percent in California alfalfa production was estimated to be up about 3 percent. Three major alfalfa producing States—Iowa, Nebraska, and South Dakota—are also forecast to have substantially lower production this year. Production of all other hay was estimated to be 17 percent less than a year ago.

With alfalfa hay production down significantly this year (in part due to drought conditions this summer), hay prices have remained strong in recent months. Mid-September prices received by farmers for baled alfalfa were about 18 percent ($65.50 per ton) higher than a year ago. Prices ranged from a low of $32 per ton in Michigan to a high of $98 in Nevada. With the shortfall in alfalfa and other hay production this year, roughage prices can be expected to remain relatively high through first-half 1981.

Pasture and range conditions in the Lake States on September 1 improved from August 1, with conditions in Michigan and Wisconsin termed good to excellent. In the Northeast, conditions declined slightly, and were termed poor to fair. Nationwide pasture and range conditions were rated 61, up from 60 on August 1, but down from 86 last year; the 10-year average rating on September 1 is 74.

1980 Production To Be a Record; Gains To Continue Into 1981

Milk output this fall will likely increase about 2 percent over the strong gains made during the fourth quarter last year (when weather and pasture conditions were very favorable). Thus milk production for all of 1980 will be about 3 percent larger than last year's 123.6 billion pounds, and the largest on record, topping the previous high of 126.97 billion pounds in 1964. Although gains in productivity per cow have eased this summer, the expansion of the dairy herd has ensured this year's production will be an alltime high.

Despite a likely acceleration in farm milk prices during 1981, the expected high feed prices will probably preclude the milk-feed price ratio from reaching the levels that prevailed from late 1977 through the first half of this year. This would tend to inhibit large gains in productivity per cow this winter and next spring. In addition, increases in milk per cow would be on top of the strong gains posted during January-June this year, which were aided by a relatively mild winter.

The outlook is much less certain for cow numbers next year. Current indications are that a large number of replacement animals are available, which means the upturn in cow numbers may not soon subside. In addition, with the support price just raised on October 1 and another increase scheduled on April 1, many dairy operations may consider the income potential of their marginal cows enough to offset much higher feed costs and increases in other production expenses.

On the other hand, with a smaller supply of processing meats (hogs and nonfed cattle) expected next year along with higher feeder cattle prices (which would keep more beef breeding stock off the slaughter market), utility cow prices can be expected to be considerably higher in 1981. The combination of higher feed prices, higher cull cow prices, and the possibility of a change in the dairy price support program could act in concert to limit further expansion in cow numbers next year, or even revive the historical downward trend in cow numbers.

In summary, less favorable milk-feed price relationships during first-half 1981 will limit gains in productivity per cow. However, milk cow numbers are almost certain to be above year-earlier levels. Thus milk production gains can be expected to continue during the first half of next year, although the rate of increase is likely to subside.

PRICES

Farm Milk Prices Fail To Make Support

During the 6-month period ending in September, manufacturing grade milk prices failed to reach the $12.36 support level (at 3.67 percent fat; $12.07 at 3.5 percent fat) established April 1. Although prices rose through the spring and summer, the September manufacturing grade milk price was still 17 cents below support when adjusted for fat content. During April-September, prices averaged about 42 cents under the support level. This shortfall from support can be attributed to the large supplies of milk and slackened demand for dairy products that has characterized 1980. September's $12.10 manufacturing grade milk price was up 6 percent from a year ago. Milk production is now seasonally declining, but supplies of milk for manufacturing purposes will be plentiful in coming months. Although commercial stocks of butter and American cheese are below year-earlier levels, manufacturers may be able to meet trade needs with their fall production due to the large milk supply. This would limit the seasonal drawdown on commercial stocks and temper increases in milk prices. However, an increase in commerical use of dairy products could result in tight commercial stocks, which would strengthen prices. The October 1 increase in the support level will also put upward pressure on manufacturing grade milk prices. On balance, it appears likely that prices this fall will average closer to support than during the spring and summer.

During September, farmers received an average $13.10 per 100 pounds for all milk, up about 6-1/2 percent from a year ago and 5 percent from the seasonal low in June. This contrasts with the 13 percent year-to-year increase in the all-milk price posted in September 1979. The slowdown in milk price increases reflects weakened dairy product sales and large milk output.

For the rest of 1980, farm milk prices will strengthen seasonally due to rising fat content, higher proportion of Class I usage, and the increase in the support price. Fall milk prices will probably average about a tenth above a year ago. For all of 1980, prices will average 8-1/2 - 9 percent above the $12.00 average of 1979.

For first-half 1981, farm milk prices will also probably average about a tenth above year-ago levels. Expected sharp increases in the retail prices of other protein foods, especially pork and poultry, along with more favorable general economic conditions, could bolster cheese demand. In addition, current commercial stock levels of butter suggest supplies of butter could tighten this fall. This would result in increased demand for rebuilding butter stocks this winter.

Minimum Class I prices in Federal order markets will average $14.17 during November, up 21 cents from October and 75 cents (5-1/2 percent) from a year ago.

During September, a number of cooperative associations announced increases of 5 to 45 cents per hundred pounds of milk in their negotiated Class I prices. This caused the estimated average over-order payment in Federal order markets to rise from 61 cents in August to 69 cents during September. Those cooperatives increasing prices charged to handlers by 5 cents reflected the August to September increase in the minimum Class I price. Larger increases may have been in anticipation of the increase in the support price on October 1. The September order minimum Class I price was based on the Minnesota-Wisconsin price for July.

Milk prices received by farmers

Month	All sold to plants			Manufacturing grade		
	1978	1979	1980	1978	1979	1980
	Dollars per 100 pounds					
January	10.20	11.90	12.80	9.17	10.90	11.80
February	10.20	11.90	12.80	9.21	10.80	11.70
March	10.20	11.80	12.70	9.27	10.80	11.80
April	10.10	11.60	12.70	9.30	10.80	11.80
May	10.10	11.50	12.60	9.26	10.80	11.70
June	10.00	11.50	12.50	9.24	10.70	11.70
July	10.10	11.60	12.60	9.28	10.80	11.60
August	10.50	12.00	12.80	9.62	11.10	11.80
September	10.90	12.30	13.10	9.96	11.40	12.10
October	11.30	12.60		10.50	11.60	
November	11.60	12.90		10.80	11.70	
December	11.80	12.80		10.90	11.70	
Average	10.60	12.00		9.65	11.10	

80 Percent Support Price Set

The support price for manufacturing grade milk for the marketing year that began October 1 was set at 80 percent of parity, or $12.80 per 100 pounds of milk containing 3.5 percent fat (tables 1 and 3). The equivalent price for milk containing 3.67 percent milkfat—the national average test—is $13.10. Under the Food and Agriculture Act of 1977, the provision requiring semiannual adjustment of the parity price remains in effect. The minimum level on April 1, 1981 will be the $12.80 price, adjusted to reflect the estimated change in the index of prices paid by farmers during the first half of the marketing year. However, the minimum level will probably be somewhat below 80 percent of the April 1 parity price. Since only the index of prices paid is taken into account in the adjustment, the January 1981 changes in the adjusted base price and the ratio of manufacturing grade milk prices to all milk prices (both of which tend to increase the parity equivalent) will not be reflected.

Table 1 --Manufacturing milk: Comparisons of announced support prices and U.S. average market prices paid to producers, marketing years, 1960-80 1/

Marketing year beginning in: 2/	Date effective 3/	Manufacturing milk				
		Support level		Average market level		
		Percentage of parity equivalent 4/	Price per 100 pounds	Price per 100 pounds	As a percentage of parity equivalent	
					In month prior to marketing year	Average during marketing year
		Percent	- - Dollars - -		- - Percent - -	
1960		76	3.06			
	9/17/60	80	3.22			
	3/10/61	85	3.40	3.31	83	83
1961		83	3.40	3.38	83	82
1962 5/		75	3.11	3.19	76	76
1963		75	3.14	3.24	77	77
1964		75	3.15	3.30	77	78
1965		75	3.24	3.45	80	79
1966		78	3.50			
	6/30/66	89.5	4.00	4.11	92	90
1967		87	4.00	4.07	88	87
1968		89.4	4.28	4.30	90	87
1969		83	4.28	4.55	88	86
1970		85	4.66	4.76	87	85
1971		85	4.93	4.91	85	82
1972		79	4.93	5.22	84	80
1973	3/15/73	75	5.29			
	8/10/73	80	5.61	6.95	99	91
1974		81	6.57			
	1/04/75	89	7.24	6.87	85	78
1975		79	7.24			
	10/02/75	84	7.71	8.12	89	84
1976		80	8.13			
	10/01/76	81	8.26	8.52	84	82
1977 6/		82	9.00	7/8.77	80	80
1977		82	9.00			
	4/1/78	86	9.43	9.30	85	79
1978		80	9.87			
	4/1/79	87	10.76	10.86	88	80
1979		80	11.49			
	4/1/80	87	12.36	11.75	82	76
1980		80	13.10			

1/ See DS-372, October 1978, table 1 for 1949-59. 2/ Start of marketing year April 1, 1960-77, October 1, 1977 to present. 3/ If other than start of year. 4/ Except as noted, this is the actual percentage of the parity equivalent price published in month before the marketing year. In some cases the announced percentages, based on forward estimates of parity, were slightly different. 5/ Beginning November 1962, parity equivalent is based on prices for all manufacturing grade milk instead of the "3-product" price for American cheese, evaporated milk, and the butter-nonfat dry milk combination used before. 6/ April-September transition period. 7/ Adjusted to annual average fat test.

Table 2 --Dairy products under price support programs, USDA purchase price per pound, 1970-80 1/

Effective date of change	Butter		Nonfat dry milk, extra grade	Natural Cheddar cheese, Grade A or higher
	Grade A or higher			
	Chicago	New York	Spray	
	Cents			
4/01/70	2/69.846	70.75	27.20	52.00
4/01/71	67.784	68.75	31.70	54.75
4/01/72	67.708	68.75	31.70	54.75
4/15/73	60.922	62.00	37.50	62.00
8/10/73	60.922	62.00	41.40	65.00
4/01/74	60.570	62.00	56.60	70.75
1/04/75	68.070	69.50	60.60	77.25
4/01/75	69.193	70.75	60.60	79.25
10/2/75	79.693	81.25	62.40	85.00
4/01/76	85.817	87.75	62.40	90.50
10/01/76	90.817	92.75	62.40	92.50
4/01/77 4/	100.710	102.75	68.00	3/98.00
4/01/78	106.710	108.75	71.00	3/103.25
10/01/78	111.300	113.50	73.75	3/106.00
4/01/79	121.800	124.00	79.00	3/116.00
10/01/79	131.330	134.00	84.00	3/124.00
4/01/80	140.580	143.25	89.50	3/132.50
10/01/80	149.000	152.00	94.00	3/139.50

1/ Prices for bulk containers--butter, 64 and 68-pound packages; nonfat dry milk, nonfortified in 50-pound bags; and cheese, mostly in 40 and 60-pound blocks. See DS-325, May 1969, table 6 for 1949-61 data and DS-372, October 1978 table 2 for 1962-69. 2/ Prices varied slightly during the year due to changes in freight rates. 3/ 3 cents less for barrel cheese. 4/ Remain in effect at the start of the marketing year beginning 10/1/77.

Table 3 --Computations of parity equivalents for manufacturing milk, per 100 pounds, marketing years, 1970-80 1/

Marketing year beginning in: 2/	Base period 3/		Ratio	Adjusted base price 6/	Parity 4/		
	All milk wholesale	Manufacturing grade milk 5/			Index (1910-14=100)	Prices	
						All milk wholesale	Equivalent of manufacturing milk
	- - Dollars - -		Percent	Dollars		- - - Dollars - - -	
1970	4.57	3.65	79.9	1.78	386	6.87	5.49
1971	4.73	3.79	80.3	1.79	405	7.21	5.79
1972	4.89	3.94	80.6	1.82	423	7.70	6.21
1973	5.09	4.13	81.1	1.83	473	8.64	7.01
1974	5.39	4.43	82.2	1.80	549	9.88	8.12
1975	5.81	4.83	83.1	1.80	612	11.00	9.14
1976	6.26	5.26	84.0	1.82	664	12.10	10.16
1977 7/	6.75	5.72	84.7	1.88	685	12.90	10.93
1978	7.22	6.18	85.6	1.90	756	14.40	12.33
1979	7.74	6.73	87.0	1.91	862	16.50	14.36
1980	8.40	7.39	88.0	1.91	972	18.60	16.37

1/ See DS-325, May 1969, table 7 for 1948-61 and DS-372, October 1978 table 3 for 1962-69. 2/ Marketing year began on April 1 until shifted to October 1 in 1977. 3/ For the 10 calendar years immediately preceding. 4/ From issues of Agricultural Prices immediately preceding start of marketing year. 5/ Prior to November 1962, the "3-product" price series was used. 6/ 120-month average of farm prices for all wholesale milk divided by 120-month average of the Index of Prices Received by Farmers (both adjusted for supplemental payments), ending with December of previous year. Actual price received during 1910-14 was $1.61. 7/ Computations were identical on both April 1 and October 1.

In order to effect a support price of $12.80 per hundredweight of manufacturing grade milk, the support purchase price for butter was raised 8-1/2 cents per pound to $1.49 in Chicago ($1.52 in New York), while the purchase price for nonfat dry milk was raised 4-1/2 cents per pound to $.94 (table 2). The increase in the milk price was split about evenly between the two products. The support purchase prices for cheese were raised 7 cents to $1.395 per pound for 40-pound blocks and $1.365 for 500-pound barrels.

The manufacturing margins used to calculate CCC purchase prices were maintained at levels used during the 1979/80 marketing year. CCC will continue to offer for sale accumulated stocks for unrestricted use at 105 percent of the new CCC purchase prices. The value of whey solids-not-fat used in the calculation of the CCC purchase price of cheese continued to be zero, while the differential paid for vitamin-fortified nonfat dry milk remained at 1.25 cents per pound.

Cash Receipts Increase

Gross income to dairymen was up 11 percent from a year ago during July-August, due to both higher prices and larger marketings. For the year thus far, cash receipts are about 12 percent greater. Cash receipts for all of 1980 will be around $16-1/2 billion, up from $14.7 billion in 1979.

For the July-September quarter, the index of prices paid for production items by all farmers was 10-1/2 percent higher than a year ago. The feed price component increased sharply during the summer. With prices paid by farmers rising at a rate similar to the gain in cash receipts, net income to dairy operations approximated the relatively favorable conditions of the past 2 years. With feed price increases likely to outpace milk price advances this fall, net income conditions for dairymen may deteriorate somewhat in the coming months.

Wholesale Prices Advance

Wholesale prices of dairy products advanced during the summer and late September. Prices of butter and American cheese moved above the April-September CCC purchase prices, while prices of nonfat dry milk rose to CCC purchase price levels.

Grade A butter prices advanced over 6-1/2 cents in early August. Although the wholesale butter price dropped slightly and stabilized, prices went up again

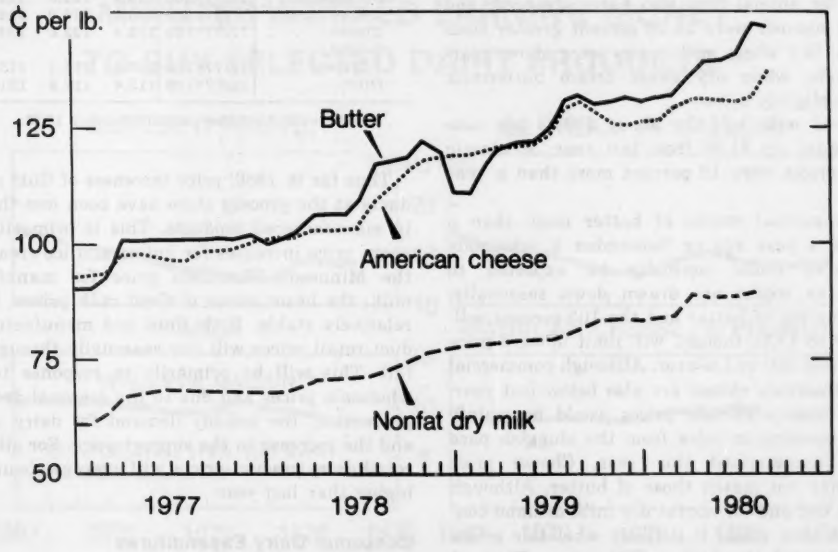


Figure 8

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Neg. ESCS 79-80 (10)

in September in anticipation of the October 1 increase in CCC purchase prices. As of late September, Grade A butter prices in Chicago were quoted at $1.4662 per pound, or 6 cents above the old support purchase price, but about 2-1/2 cents shy of the purchase price effective October 1 (figure 8).

From April though early August, wholesale prices of 40-pound blocks of cheddar cheese at Wisconsin assembling plants remained constant at around $1.31 per pound, or near the support purchase price. Since then though, prices have moved upward in anticipation of the October 1 increase in CCC buying prices. In late September, cheese prices stood at $1.405 per pound, or about 1/2 cent above the new support purchase price. Prices of 500-pound barrels of cheese also varied little until August, but advanced sharply in late September. The late September wholesale quote for barrel cheese was $1.355 per pound, or 1 cent short of the higher CCC purchase price effective October 1.

Wholesale nonfat dry milk prices moved up somewhat during August-September, but were at or just slightly above the April support purchase price. The late September wholesale price for nonfat dry milk (Central States, high heat) was about 90 cents per pound, 4 cents below the support purchase effective October 1. Among other dry milk products, stronger demand for and lighter stock levels of edible dry whey have resulted in September prices in the 15-16 cent range, compared with prices in the 10-11 cent range that had prevailed since early 1979. Prices of dry whey for animal feed also have advanced, and prices this summer were 15-20 percent greater than a year ago. Dry whole milk prices were above year-earlier levels, while dry sweet cream buttermilk prices were slightly below.

Evaporated milk sold for about $19.83 per case during August, up $1.86 from last year. Wholesale ice cream prices were 12 percent more than a year ago.

With commercial stocks of butter more than a third below a year ago on September 1, wholesale butter prices would normally be expected to strengthen as stocks are drawn down seasonally. Large production of butter and the 105-percent sell-back policy by CCC, though, will limit upward price movement this fall and winter. Although commercial stocks of American cheese are also below last year, any strength in wholesale prices would be mainly due to an upswing in sales from the sluggish pace that has characterized this year. Cheese price increases may not match those of butter. Although commerical demand for nonfat dry milk demand continues to be very weak, it is likely wholesale prices will move toward the higher CCC prices. Thus, it appears that with continued large output of manufactured products the CCC will purchase dairy products this fall.

The Bureau of Labor Statistics (BLS) index of wholesale prices stood at 183.3 (1967=100) in August, up 7 percent from last year and 1.7 percent from March. The October 1 increase in CCC support purchase prices will push this index higher in the coming months.

Retail Prices Up About A Tenth

During August, the BLS retail dairy product price index stood at 229.7, up 10 percent from a year ago and 4.6 percent from February. Both higher farm milk prices (up 6.6 percent from last year) and an increase in farm-to-retail marketing costs contributed. Through the first 8 months of 1980, retail dairy prices averaged 10.3 percent above last year, compared with an average gain of 11.6 percent during all of 1979 (figure 9). The all food retail price index was up 9.5 percent from a year ago during August.

Retail dairy product prices

Item	Index base	Aug. 1979	Dec. 1979	Mar. 1980	Aug. 1980
Consumer Price Index[1]	1967=100	221.1	229.9	239.8	249.4
All food[1]	1967=100	236.3	241.7	247.3	258.7
All dairy products[1]	1967=100	208.6	216.9	220.3	229.7
Fluid milk and cream	12/77=100	117.7	122.7	124.1	127.9
Whole milk	1967=100	192.8	201.2	204.0	209.8
Other	12/77=100	117.4	122.0	122.7	127.1
Manufactured dairy products	12/77=100	118.2	122.5	125.1	132.5
Butter	1967=100	203.0	214.0	218.3	231.2
Cheese	12/77=100	118.4	122.6	124.9	130.4
Frozen desserts	12/77=100	203.3	211.6	215.9	236.5
Other	12/77=100	115.4	117.9	121.6	128.3

[1] For all urban consumers starting January 1978.

Thus far in 1980, price increases of fluid milk products at the grocery store have been less than gains in manufactured products. This is primarily due to sharp price increases for butter and ice cream, while the Minnesota-Wisconsin price for manufacturing milk, the basic mover of fluid milk prices, has been relatively stable. Both fluid and manufactured product retail prices will rise seasonally throughout the fall. This will be primarily in response to higher wholesale prices and due to the seasonal decrease in production, the holiday demand for dairy products, and the increase in the support price. For all of 1980, retail dairy product prices will average about a tenth higher than last year.

Consumer Dairy Expenditures Up Sharply to $34 Billion in 1979

Consumers spent $34.0 billion for milk and dairy products during 1979, up 16 percent from 1978

Retail Food and Dairy Product Prices

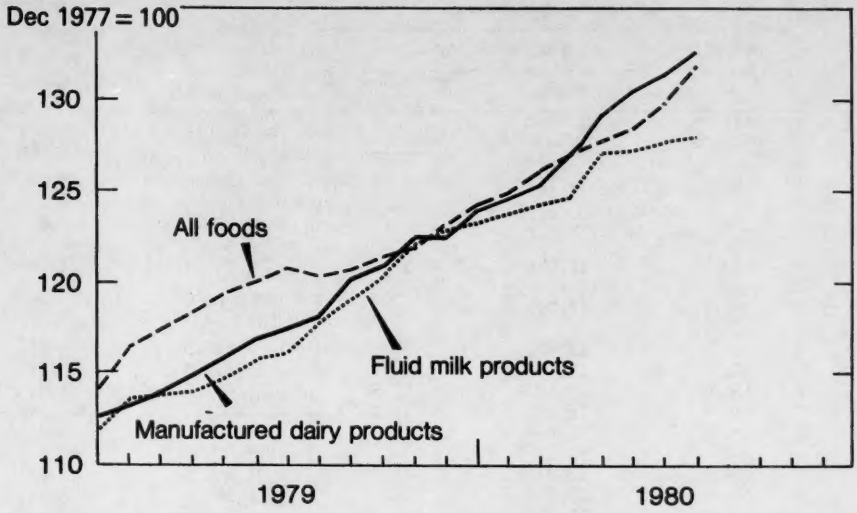

Figure 9

USDA

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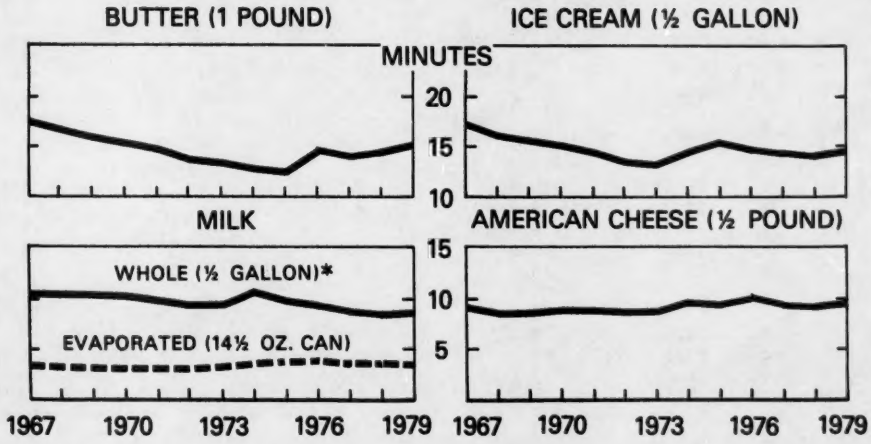
MINUTES WORKED EARNING MONEY TO BUY SELECTED DAIRY PRODUCTS △



△ DATA ARE BASED ON HOURLY WAGE RATES OF ALL MANUFACTURING INDUSTRIES. * BOUGHT AT STORES.

USDA

Figure 10

NEG. ESCS 8690-80(10)

Table 4 --Consumer expenditures for food and dairy products, income, and labor required to purchase specified dairy products, selected years, 1950-79

Year	Consumer expenditures			Disposable personal income	Hourly wage rate 2/
	For all foods 1/	For dairy products			
		Amount	Percentage of all food		
	Billion dollars	Million dollars	Percent	Billion dollars	Dollars
1950	46.0	8,157	17.7	205.4	1.44
1955	58.1	10,301	17.7	273.3	1.86
1960	70.5	12,098	17.2	349.4	2.26
1965	85.8	13,049	15.2	472.2	2.61
1970	118.6	16,435	13.9	685.9	3.35
1971	122.0	17,160	14.1	742.8	3.57
1972	130.6	17,689	13.5	801.3	3.82
1973	146.8	19,006	12.9	901.7	4.09
1974	166.9	21,496	12.9	984.6	4.42
1975	184.7	22,970	12.4	1,086.7	4.83
1976	200.2	25,993	13.0	1,184.5	5.22
1977	217.9	27,032	12.4	1,305.1	5.68
1978	240.7	29,279	12.2	1,458.4	6.17
1979 3/	267.8	34,045	12.7	1,624.3	6.69

	Time worked to earn money to purchase 4/				
	Butter, 1-lb.	Milk at stores, ½-gal.	American cheese, ½-lb.	Ice cream, ½-gal.	Evaporated milk, 14½-oz. can
	Minutes				
1950	29.6	15.8	11.7	5/35.6	5.1
1955	22.5	13.8	10.2	26.6	4.3
1960	19.5	12.8	9.0	22.2	4.1
1965	17.3	10.9	8.7	18.1	3.5
1970	15.5	10.3	9.0	15.1	3.4
1971	14.7	9.9	8.9	14.4	3.3
1972	13.7	9.4	8.5	13.5	3.1
1973	13.4	9.6	8.9	13.3	3.3
1974	12.8	10.6	9.9	14.6	3.9
1975	12.7	9.8	9.5	15.2	3.8
1976	14.5	9.5	9.9	14.6	3.9
1977	14.1	8.9	9.4	14.3	3.8
1978	14.4	8.5	9.3	14.2	3.7
1979 3/	15.0	8.7	9.6	14.6	3.7

1/ Excludes alcoholic beverages, food donated by the Government, non-personal spending for food, and institutional food use. 2/ Average of all manufacturing industries. 3/ Preliminary. 4/ Based on hourly wage rates of all manufacturing industries.

(table 4). This compares with an 11-percent increase in consumer expenditues for all foods. With only a small gain in the consumption of dairy products last year, most of the increase in expenditures was due to an increase of 11.6 percent in retail prices. Since 1977, the proportion of dairy products eaten at home has increased slightly. In 1979, consumers spent $19.2 billion, or 21-1/2 percent more, on manufactured dairy products, and $14.8 billion on fluid milk products, an increase of 9-1/2 percent from 1978. Dairy farmers received about $14.7 billion for milk marketed in 1979, about the same proportion of the consumer's food dollar as the year before.

Item	Consumer expenditures for dairy products	
	1978	1979
	Billion dollars	
At-home	20.0	23.3
Away-from-home	9.3	10.7
Public eating places	7.0	8.0
Institutions	2.3	2.7
Total	29.3	34.0

Personal disposable income increased about 11-1/2 percent in 1979, and wages rose about 8-1/2 percent. Meanwhile, retail dairy product prices averaged 11.6 percent higher in 1979 than the year before. As a result, the average wage earner had to work longer to earn the money to purchase dairy products in 1979 (figure 10). Whereas it took 14.4 minutes to earn the money to buy a pound of butter in 1978, it took 15.0 minutes in 1979. There were similar increases in the time worked to purchase fresh whole milk, American cheese, and ice cream.

UTILIZATION

Manufactured Product Output Still Large

Milk used in manufactured dairy products during July-August was 7.5 percent (about 850 million pounds) more than in 1979 and 12.2 percent larger than 1978. This reflects increased total milk production, as there has been little change in fluid milk sales and thus more fluid grade milk has been diverted for use in making manufactured products. For the January-August period, manufactured dairy products have used, on a milk equivalent basis, 3.3 billion pounds more than for the same period in 1979. Almost all of the increased milk available for manufacturing purposes was used in making more butter and American cheese—these two products used 3.2 billion pounds more milk.

Production of American cheese during July-August was 6.8 percent above a year ago and used 280 million pounds of milk from the extra available supply during the period. From January through August, the increased output of American cheese absorbed about a third (1.0 billion pounds) of the additional 3.3 billion pounds of milk to be used in making dairy products. Given the large supply of raw milk and weak American cheese sales, a number of cheesemakers maintained their production knowing that CCC would provide a market for their product at a stated price. In fact, some cheesemakers sold to CCC for the first time in a number of years. At the same time, manufacture of other cheese varieties during July-August was down 2.7 percent. Thus far in 1980, other cheese production is up 2.4 percent; however, since May, production has declined each month, compared with the same period in 1979. This adjustment in production of other-than-American cheese is in continued response to lower sales and high stocks.

Production of selected manufactured dairy products, 1978-79

Item	January-August		Change from year earlier	
	1979	1980[1]	1979	1980[1]
	Million pounds		*Percent*	
Butter	686.3	788.6	-4.1	+14.9
Cheese:				
American	1,508.8	1,608.7	+4.1	+6.6
Other	1,009.7	1,033.5	+6.9	+2.4
Cottage, creamed	576.4	570.8	-3.7	-1.0
Canned milk	556.3	506.5	+0.4	-9.0
Dry whole milk	60.4	55.1	+12.1	-8.8
Ice cream (Mil. gal.)	566.3	578.6	-0.4	+2.2
Milk equivalent[2]	45,899	49,231	+0.1	+7.3
Nonfat dry milk	666.3	843.2	-7.0	+26.6

[1] Preliminary. [2] Total all reported manufactured products.

Butter production in July-August was 19 percent larger than in 1979 and used about 570 million pounds more milk than in 1979. For the January to August period, the larger level of butter production has absorbed about two-thirds (2.1 billion pounds) of the increased milk supply to be used in making dairy products.

Among other manufactured dairy products, nonfat dry milk output during July-August was up 28 percent, as large amounts of skim milk were made available from the butter production process. Lactose manufacture was up 9.3 percent as whey supply for its production is readily available and demand for the product continued strong. Meanwhile, July-August production of dry buttermilk posted a 1.8 percent year-to-year increase as butter production is up.

Table 5--Commercial disappearance: Total milk, annual and by quarters, 1978-80 1/

Item	1978	1979					1980 2/				
		By quarters				Annual	By quarters				Annual
		1st	2nd	3rd	4th		1st	2nd	July-Aug.	4th	
		Billion pounds									
Production	121.6	29.8	32.8	31.2	29.8	123.6	31.1	34.0	21.8		
Farm use	2.7	.6	.6	.6	.6	2.5	.6	.6	.4		
Marketings	119.0	29.2	32.2	30.6	29.2	121.1	30.5	33.4	21.4		
Beginning commercial stocks	4.9	4.5	4.9	6.4	6.6	4.5	5.4	5.6	6.2		
Imports	2.3	.4	.5	.6	.9	2.3	.4	.4	.3		
Total supply	126.2	34.1	37.6	37.6	36.7	127.9	36.3	39.4	27.9		
Ending commercial stocks	4.5	4.9	6.4	6.6	5.4	5.4	5.6	6.2	5.9		
Net removals	2.7	.2	1.1	4/	.8	2.1	1.5	4.4	1.3		
Commercial disappearance Actual	118.9	28.9	30.2	30.8	30.4	120.4	29.2	28.7	20.7		
Percent change 3/	+2.4	+2.1	+ .8	+ .6	+1.4	+1.2	5/-0.1	-4.9	+ .1		

1/ Milk equivalent, fat solids basis. Totals may not add due to rounding.
2/ Preliminary.
3/ From year earlier using unrounded data.
4/ Less than 50,000 pounds.
5/ On a daily average basis.

Table 6--Commercial disappearance: Selected dairy products, United States, annual 1970-79, quarters, 1979-80 1/

Year and quarter	Butter 2/	Cheese		Nonfat dry milk	Canned Milk	Frozen products 4/
		American 3/	Other			
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. gal.
1970	898.2	1,398.0	909.1	983.2	1,213.8	1,097.3
1971	847.1	1,454.8	987.0	981.8	1,186.9	1,102.4
1972	885.4	1,595.7	1,127.8	919.2	1,102.6	1,108.6
1973	855.6	1,677.1	1,210.2	1,110.1	1,056.7	1,118.6
1974	929.9	1,780.6	1,276.5	809.9	999.5	1,128.0
1975	951.0	1,717.1	1,331.9	697.0	923.9	1,183.9
1976	919.0	1,920.9	1,458.0	719.2	899.0	1,154.0
1977	859.8	1,958.8	1,512.3	682.2	775.2	1,167.6
1978	903.5	2,064.7	1,655.5	658.4	776.1	1,173.5
1979	895.0	2,110.9	1,730.7	603.1	773.7	1,152.9
1979 - 1st	248.3	515.2	384.8	166.3	198.8	250.5
2nd	203.0	541.6	428.8	117.2	162.3	323.6
3rd	202.1	510.0	440.4	197.3	185.9	339.4
4th	241.6	543.5	476.9	122.2	226.6	239.4
1980 - 1st	251.0	508.6	419.3	158.7	177.4	251.3
2nd	161.5	495.2	424.7	73.6	158.5	322.7
July-Aug.	158.7	318.3	276.9	108.0	105.0	246.6
4th						
	1979-80 percent change					
1st 5/	- .3	- 2.5	+ 7.9	- 6.2	-11.8	- .8
2nd	-20.4	- 8.6	- .9	-37.2	- 2.3	- .3
July-Aug.	+14.4	- 6.0	- 5.6	-21.3	-14.1	+ 2.8
4th						

1/ Totals may not add due to rounding. 2/ Imports include butter equivalent of butteroil. 3/ Imports include Colby cheese; stocks do not include processed cheese. 4/ Excludes Mellorine. 5/ On a daily average basis.

Wisconsin out-of-state milk shipments

Month	1979		1980	
	Loads	Volume	Loads	Volume
	Number	*Thousand pounds*	*Number*	*Thousand pounds*
January	302	14,194	156	7,332
February	180	8,460	70	3,290
March	64	3,008	20	940
April	17	799	0	0
May	24	1,128	0	0
June	6	282	0	0
July	36	1,692	119	5,593
August	157	7,379	146	6,862
September	294	13,818	190	8,930
October	175	8,225		
November	232	10,904		
December	251	11,797		
Total	1,738	81,686		

Changes in dairy sales from year earlier

Item	Change		
	Jan.-Mar.	Apr.-June	July-Aug.
	Percent		
Total milk[1]	+1.1	-4.9	+0.1
Manufactured products:			
American cheese	-1.3	-8.6	-6.0
Other cheese	+9.0	-0.9	-5.6
Cottage cheese[2]	+0.2	+0.1	+3.1
Butter	+1.1	-20.4	+14.4
Ice cream	+2.2	+0.8	+3.9
Ice milk	-5.9	-2.7	-0.5
Canned milk	-10.8	-2.3	-14.1
Nonfat dry milk	-4.6	-37.1	-21.3
Fluid products	-1.1	-1.1	N.A.
Whole milk	-4.5	-4.4	N.A.
Skim and lowfat milk	+3.8	+3.8	N.A.
Cream and mixtures	+2.8	+1.4	N.A.

[1] On a milk equivalent, fat-solids basis. [2] Creamed and low fat.
N.A. = Not available.

With milk production to remain above year-ago levels for the rest of this year, the manufacture of butter and American cheese will likely remain above year a ago. However, the size of the gains depends upon cheese sales. If sales pick up from the recent low levels, butter production could abate somewhat as milk is drawn away from butter-powder operations. On the other hand, cheese sales could continue weak, and butter production would likely be at levels similar to those already noted in 1980.

Commercial Use Still Off

Commercial disappearance of milk and dairy products during July-August was nearly unchanged on a milk equivalent basis (table 5). Through August, commercial use was down 1.4 percent from a year ago, as every month but February and August had a decline. As in the second quarter, the higher retail dairy product prices, the general economy and continued favorable meat prices were the primary factors contributing to this lackluster performance. With a high level of unemployment and a relatively high inflation rate, the purchasing power of the consumer is still being eroded. Thus, given a decline in their real budgets, consumers who faced meat prices below year-ago levels probably substituted low-priced pork and poultry for some cheese in their food market basket.

Commercial use of butter during July-August was up a substantial 14.4 percent as printers and other wholesale buyers probably obtained large quantities in anticipation of higher support prices effective October 1 (table 6). Meanwhile, commercial use of butter for the January-July period was down about 6.5 percent and likely reflects a truer picture of the consumer switch from butter to margarine, given the relative price changes.

During July-August, commercial disappearance of American cheese was down 6.0 percent from a year ago. With only January and February showing gains in use, American cheese consumption through August was down 5.2 percent. Meanwhile, sales of other types of cheese during July-August were down 5.6 percent, but for the year thus far are slightly above year-ago levels. Nonfat dry milk sales during July-August repeat the recent dismal months with use down about a fifth from 1979.

Commercial use of dairy products for the rest of 1980 may be more buoyant than so far this year as the rate of meat price increases will make dairy products (cheese) relatively more attractive. On the other hand, futher increases in retail dairy products prices, the current general economic outlook of relatively high unemployment, and reduced spendable income may hold back any large gains.

Commercial Stocks Tighten

Commercial stocks of dairy products this summer were below year-earlier levels for the first time since early 1979. Industry holdings of milkfat were 12 percent under a year ago on September 1, while stocks of solids-not-fat were 4.5 percent less. The dip in stock levels was due to the relatively large quantities moved to CCC this summer, and in part to the extensive stock buildup in summer 1979.

On September 1, commercial stocks of butter were more than a third less than the relatively high levels of a year ago. Butter production has been well above last year thus far in 1980 and relatively weak wholesale price levels up until early August resulted in large sales to CCC. High storage costs, the CCC 105-percent sellback policy, and apparent increases in

Table 7--Milk: Supply and utilization in all dairy products, United States, 1965-79 1/

Year	Supply						Utilization						
	Production	Imports	Beginning stocks: Commercial	Beginning stocks: Government	Total	Total use	Exports and shipments: Commercial 2/	Exports and shipments: USDA 3/	Exports and shipments: Total	Domestic disappearance: Fed to calves	Domestic disappearance: Food use: Military	Domestic disappearance: Food use: Civilian consumption: Total	Domestic disappearance: Food use: Civilian consumption: Per capita
	Million pounds												Pounds
1965	124,180	923	4,317	973	130,393	125,937	1,710	648	2,358	2,061	2,819	118,699	620
1966	119,912	2,791	3,918	538	127,159	122,300	907	301	1,208	1,980	2,376	116,736	604
1967	118,732	2,908	4,813	46	126,499	118,247	593	231	824	1,891	2,117	113,415	581
1968	117,225	1,780	4,258	3,994	127,257	120,550	814	957	1,771	1,821	3,295	113,663	577
1969	116,108	1,621	3,983	2,724	124,436	119,191	942	477	1,419	1,745	2,696	113,232	569
1970	117,007	1,874	3,798	1,447	124,126	118,323	949	41	990	1,702	2,419	113,212	562
1971	118,566	1,346	3,705	2,098	125,715	120,611	1,063	1,963	3,026	1,635	2,031	113,919	558
1972	120,025	1,694	3,565	1,539	126,823	121,325	1,263	884	2,147	1,624	1,671	115,883	561
1973	115,491	3,860	3,493	2,005	124,849	119,641	1,213	79	1,292	1,584	1,257	115,508	555
1974	115,586	2,923	4,732	476	123,717	117,831	1,133	25	1,158	1,558	1,137	113,978	544
1975	115,334	1,669	5,576	310	122,889	119,046	1,026	20	1,046	1,567	1,075	115,358	546
1976	120,269	1,943	3,719	124	126,055	120,346	1,004	23	1,027	1,562	1,013	116,744	548
1977	122,698	1,968	5,299	410	130,375	121,749	963	29	992	1,548	996	118,213	551
1978	121,609	2,310	4,916	3,710	132,545	123,816	927	51	978	1,499	977	120,362	556
1979 4/	123,623	2,305	4,475	4,254	134,657	126,053	982	38	1,020	1,449	977	122,607	561

1/ Milk equivalent, fat solids basis. 2/ Includes sales for dollars and government-to-government sales. 3/ Includes P.L. 480 and Aid programs. 4/ Preliminary.

Table 8--Dairy products: Per capita civilian consumption, United States, 1965-79 1/

Year	Fluid milk and cream 2/: Sales of fluid products	Fluid milk and cream 2/: Total	Butter	Cheese: Whole and part skim milk 3/: American	Cheese: Whole and part skim milk 3/: Other	Cheese: Cottage cheese	Evaporated and condensed: Canned, whole milk	Evaporated and condensed: Bulk condensed, whole milk	Evaporated and condensed: Skim and buttermilk	Frozen products: Ice cream	Frozen products: Ice milk	Frozen products: Sherbet	Frozen products: Other frozen dairy products	Frozen products: Mellorine	Dry milk products: Dry whole milk	Dry milk products: Nonfat dry milk	Dry milk products: Dry buttermilk	Dry milk products: Dry whey 4/
	Pounds																	
1965	272	290	6.4	6.2	3.4	4.6	8.6	2.1	5.0	18.5	6.6	1.5	0.2	1.3	0.3	5.6	0.4	0.6
1966	272	289	5.7	6.2	3.6	4.6	7.9	1.9	5.4	18.2	6.8	1.6	.2	1.3	.3	5.9	.3	.7
1967	265	280	5.5	6.4	3.7	4.5	7.3	1.7	5.0	17.8	7.0	1.5	.2	1.3	.3	5.6	.3	.9
1968	266	280	5.7	6.6	4.0	4.6	7.1	1.8	4.8	18.4	7.2	1.6	.2	1.4	.2	5.8	.3	1.1
1969	265	277	5.4	6.7	4.2	4.8	6.4	1.5	5.0	18.0	7.6	1.7	.2	1.3	.2	5.8	.3	1.2
1970	264	275	5.3	7.1	4.4	5.2	5.9	1.2	5.0	17.7	7.8	1.6	.2	1.2	.2	5.4	.2	1.5
1971	263	273	5.1	7.4	4.7	5.4	5.7	1.1	5.1	17.5	7.8	1.6	.2	1.1	.2	5.3	.3	1.6
1972	266	275	4.9	7.8	5.4	5.4	5.1	1.2	4.8	17.4	7.7	1.6	.3	1.1	.1	4.6	.2	1.8
1973	264	272	4.8	8.0	5.7	5.3	4.9	1.1	4.3	17.5	7.7	1.7	.3	.9	.1	5.3	.2	1.8
1974	256	264	4.6	8.6	6.0	4.7	4.4	1.2	3.5	17.5	7.8	1.6	.3	.8	.1	4.2	.2	2.2
1975	262	269	4.8	8.3	6.2	4.7	3.9	1.4	3.6	18.7	7.8	1.5	.3	.7	.1	3.3	.2	2.3
1976	260	266	4.4	9.1	6.8	4.8	3.7	1.3	3.7	18.1	7.4	1.5	.3	.5	.2	3.6	.2	2.5
1977	257	263	4.4	9.4	6.9	4.8	3.2	1.1	4.0	17.8	7.9	1.5	.3	.4	.2	3.4	.3	2.5
1978	256	261	4.5	9.7	7.5	4.8	3.1	1.0	3.6	17.7	7.9	1.4	.4	.4	.3	3.2	.2	2.5
1979 5/	253	258	4.6	9.8	7.8	4.6	3.1	1.1	3.4	17.5	7.5	1.3	.3	.3	.3	3.4	.2	2.7

1/ See table 15, DS-332, for earlier years. 2/ Product pounds. 3/ Excludes cottage cheese. 4/ Includes modified dry whey products beginning 1975. 5/ Preliminary.

Dairy product stocks

Item	Sept. 1 1978	Sept. 1 1979	Sept. 1 1980
	Million pounds		
Commercial:			
Butter	41.7	56.9	37.3
American cheese	399.9	456.9	407.7
Other cheese	72.9	98.6	114.0
Nonfat dry milk	73.9	110.2	109.7
Milkfat	198.3	236.1	208.6
Solids-not-fat	246.0	304.4	290.5
Milk equivalent	5,663	6,691	5,883
Government:			
Butter	242.9	182.2	257.9
American cheese	50.7	3.3	151.3
Nonfat dry milk	626.8	450.1	472.9
Milkfat	211.8	147.8	256.3
Solids-not-fat	618.6	434.0	501.5
Milk equivalent	5,516	3,796	6,822

user and retail stocks also have contributed to the lowering in commercial stocks.

Industry stocks of American cheese on September 1 were down nearly 11 percent from a year earlier. Like butter, large sales to the CCC due to weakened demand, high storage costs, and the 105-percent sellback policy accounted for the drop in commercial stocks. Although large Government stocks of cheese are available for sellback in the coming months, the decline in stocks relative to a year ago could result in increased demand for milk for American cheese production to slow the seasonal decline in stocks. Commercial stores of other varieties of cheese were about 16 percent above a year ago on September 1, and were at the highest level ever. These large stocks are due to weakened sales of other-than-American cheese, since production of these cheeses has been less than a year ago in recent months.

Manufacturers' stocks of nonfat dry milk on September 1 were the same as a year ago, but were ample for trade needs. Dry whey (edible) stocks were 37 percent below a year ago, due to strong demand and production below year-earlier levels. Manufacturers' holdings of lactose were 2 percent more than last year.

CCC Purchases Large This Summer

The CCC continued to purchase large quantities of dairy products this summer, due to the slack supply-demand balance. Although butter prices moved above support and 2.7 million pounds were sold back to the industry by CCC, net removals by the Government during July-September still totaled 9.6 million pounds. This contrasts with the 3.4 million pounds sold back to the industry during the similar period last year. Purchases of nonfat dry milk declined seasonally from this spring, but third quarter purchases of 178.6 million pounds were about 170 percent greater than a year ago. In spite of strengthened wholesale cheese prices this summer, cheesemakers cleared 126.4 million pounds of cheese to CCC during July-September, compared with 118.3 million pounds during April-June and 8.6 million pounds last year. Milk equivalent purchases totaled 1.46 billion pounds during July-September, compared with 22.8 million pounds during the same period last year.

USDA dairy purchases[1]

Item	January-September		
	1979	1980	Change
	Million pounds		*Percent*
Butter	56.3	207.6	+268.7
American cheese	12.1	307.5	*
Nonfat dry milk	187.2	524.2	+180.0
Evaporated milk	12.8	11.8	-7.8
Milk equivalent	1,311	7,351	+460.7

[1] Delivery basis, after sales for unrestricted use. *More than 1,000.

Thus far in 1980, the CCC has removed the equivalent of 7.35 billion pounds of milk from the market, or about 3-1/2 times as much as in all of 1979. Purchases of all products were considerably above year-ago levels, and for all of 1980, milk equivalent removals will probably be the largest since 1962, when the CCC purchased 10.7 billion pounds milk equivalent. Cheese purchases will be at an alltime high for all of 1980.

For the marketing year just concluded, CCC removed about 6-2/3 percent of total marketings of milkfat from commercial markets, and more than 6-1/3 percent of the solids-not-fat (table 9). This compares with removals of 1 percent and 2 percent during 1978/79 of milkfat and solids-not-fat, respectively. Milk equivalent removals during the 1979/80 marketing year totaled 8.2 billion pounds, compared with 1.1 billion pounds the previous year. The milk equivalent removals by CCC represented about 6-1/2 percent of the total milk marketings. CCC net purchase costs (purchases less sales back to the industry for unrestricted use) totaled approximately $1,275 million, compared with about $230 million during the 1978/79 marketing year.

USDA purchases of all dairy products were up substantially during the 1979/80 marketing year. The sharpest increase was for cheese, which increased from 12 million to 336 million pounds. Butter purchases were 5 times larger, while powder purchases were nearly 3 times as great.

October 1 CCC uncommitted inventories of butter were up 30 percent from a year ago to 266.5 million pounds, while Government holdings of nonfat dry milk totaled 548 million pounds, about 6-1/2 percent

Table 9--Dairy products removed from the commercial market by programs of the U.S. Department of Agriculture, marketing years, 1965-79 1/

Marketing year beginning in: 2/	Removals 3/						Solids content of removals			
	Butter 4/	Cheddar cheese	Dry whole milk	Evaporated milk	Nonfat dry milk 5/	Milk equivalent	Milkfat	Solids-not-fat	As a percentage of marketings: Milkfat	As a percentage of marketings: Solids-not-fat
	Million pounds					Bil. lb.	Million pounds		Percent	
1965	126.3	21.2	---	---	880.5	2.9	114.8	854.9	2.6	8.7
1966	109.2	39.9	---	---	421.0	2.7	103.6	418.4	2.4	4.4
1967	246.5	175.1	---	---	633.4	7.0	259.3	665.7	6.2	7.0
1968	186.4	66.9	---	54.9	555.9	4.8	179.8	567.1	4.4	6.0
1969	182.1	30.6	---	107.5	357.6	4.4	167.4	374.6	4.1	3.9
1970	305.4	56.8	---	79.0	452.3	7.2	273.5	469.9	6.6	4.9
1971	262.4	87.0	0.6	102.0	463.5	6.6	250.7	494.1	5.9	5.0
1972	220.2	20.1	1.5	81.2	259.9	5.0	192.4	274.1	4.5	2.8
1973	26.1	4.9	3.4	50.0	41.6	.7	27.7	53.2	.7	.6
1974	66.9	93.5	.9	33.7	393.6	2.4	89.6	414.8	2.2	4.3
1975	26.1	33.3	---	24.5	274.8	.9	35.6	279.3	.9	2.9
1976	114.9	96.9	---	16.5	186.4	3.4	126.3	213.3	2.9	2.1
1977 6/	133.9	87.4	---	9.7	345.5	3.6	139.1	362.4	---	---
1977	134.6	41.6	---	17.4	338.5	3.2	125.5	342.9	2.9	3.3
1978	46.2	12.1	---	17.4	202.5	1.1	43.9	202.1	1.0	2.0
1979	233.0	335.6	---	15.4	592.2	8.2	301.0	678.2	6.8	6.5

1/ For earlier years see DS-335, May 1971, page 22. 2/ Start of marketing year April 1, 1965-77, October 1, 1977 to present. 3/ Delivery basis after domestic unrestricted sales. Includes purchases of butter, cheese, evaporated milk, and nonfat dry milk under Section 709 and Section 4(a). 4/ Includes butter equivalent of anhydrous milkfat, and PIK purchases. 5/ Includes PIK certificates issued; beginning January 1972, also includes Title I exports originating from private stocks. 6/ April-September transition period.

Uncommitted CCC stocks

Item	September 30	
	1979	1980
	Million pounds	
Butter	147.1	266.5
American cheese	*	195.9
Nonfat dry milk	447.9	548.0

*Less than 50,000 pounds.

less than last year. October 1 uncommitted inventories of cheese were 196 million pounds, compared with zero holdings a year ago.

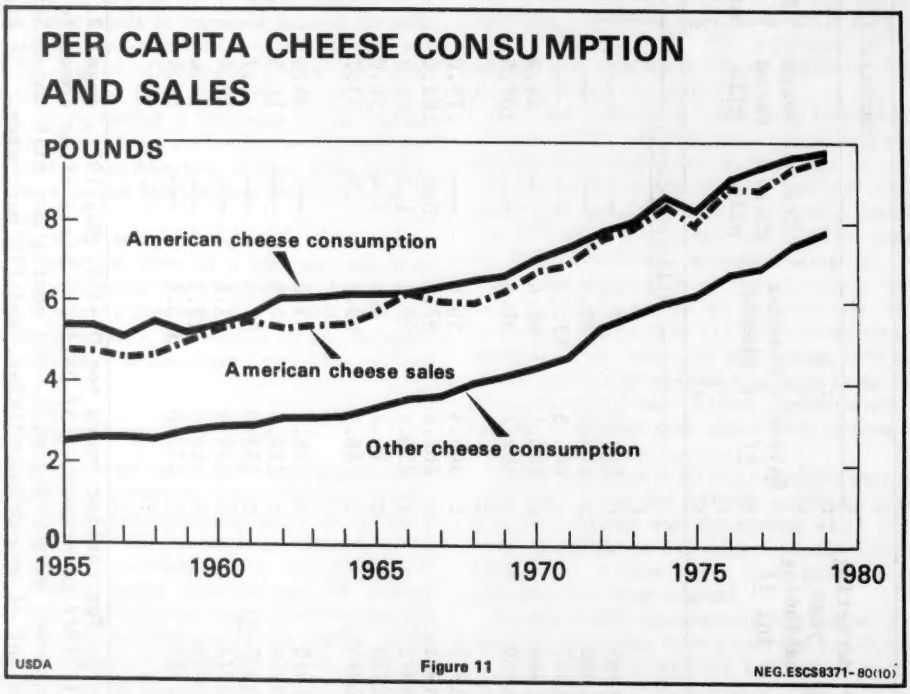
Increased American and Italian Cheese Use Boost 1979 Total

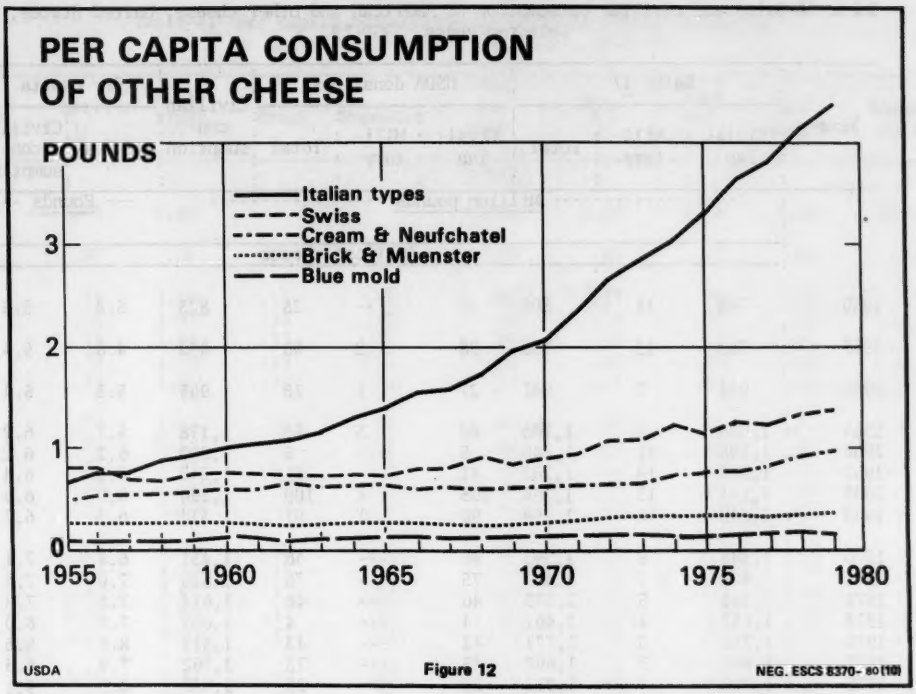
Per capita consumption of natural cheeese, processed cheese, and processed cheese foods and spreads rose 1/2 pound to 17.6 pounds in 1979 on a natural equivalent basis (table 13 and figure 13). The bulk of the increase was due to larger use of American and Italian-types of cheese (figures 11 and 12; tables 10, 11 and 12). Between 1969 and 1979, per person consumption of cheese increased 60 percent.

Estimated per capita civilian consumption of Cheddar and other American cheese, United States, 1950-79

Year	Cheddar	Other American[1]	Total American types
		Pounds	
1950	5.2	0.3	5.5
1955	4.9	.5	5.4
1960	4.8	.6	5.4
1965	5.3	.9	6.2
1966	5.0	1.2	6.2
1967	5.2	1.2	6.4
1968	5.4	1.2	6.6
1969	5.7	1.1	6.7
1970	5.9	1.2	7.1
1971	6.0	1.4	7.4
1972	6.1	1.7	7.8
1973	6.2	1.8	8.0
1974	6.4	2.2	8.6
1975	6.1	2.2	8.3
1976	6.6	2.5	9.1
1977	6.9	2.5	9.4
1978	7.1	2.6	9.7
1979	7.2	2.7	9.9

[1] Colby, washed or stirred curd, high and low moisture jack, Monterey and granular.




PER CAPITA CONSUMPTION
OF OTHER CHEESE
POUNDS
Italian types
Swiss
Cream & Neufchatel
Brick & Muenster
Blue mold
3
2
1
0
1955
1960
1965
1970
1975
1980
USDA
Figure 12
NEG. ESCS 8370-80(10)

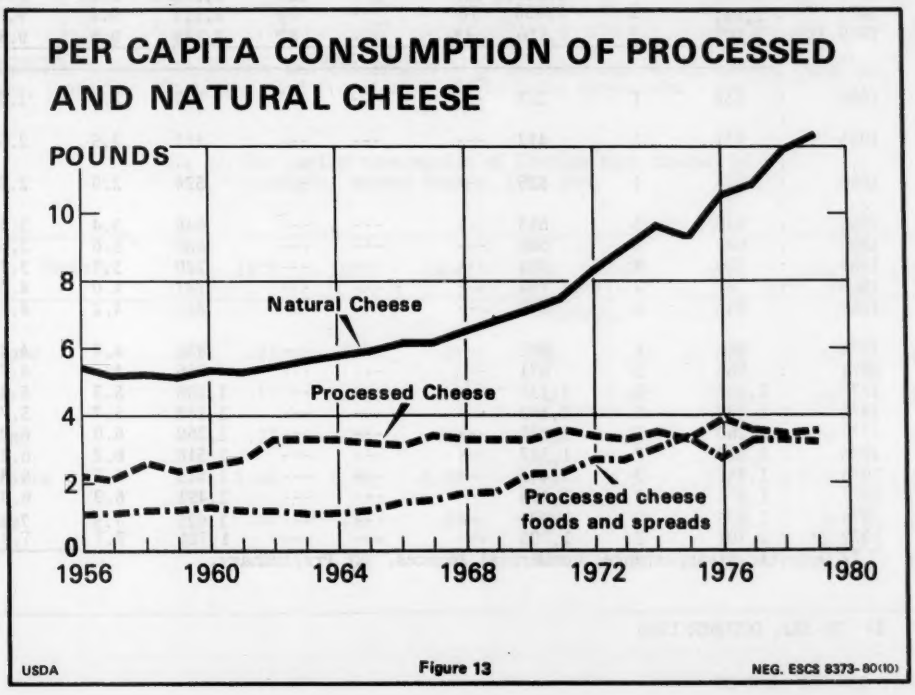

PER CAPITA CONSUMPTION OF PROCESSED
AND NATURAL CHEESE
POUNDS
10
8
6
4
2
0
Natural Cheese
Processed Cheese
Processed cheese
foods and spreads
1956
1960
1964
1968
1972
1976
1980
USDA
Figure 13
NEG. ESCS 8373-80(10)

Table 10--Sales and civilian consumption of American and other cheese, United States, selected years, 1950-79

Year	Sales 1/			USDA donations			Civilian consumption	Per capita	
	Civilian	Military	Total	Civilian	Military	Total		Sales	Civilian consumption
	Million pounds							Pounds	
	American cheese								
1950	798	11	809	25	---	25	823	5.4	5.5
1955	782	13	795	88	2	90	870	4.8	5.4
1960	938	7	945	27	1	28	965	5.3	5.4
1965	1,098	8	1,106	80	3	83	1,178	5.7	6.2
1966	1,195	11	1,206	5	---	5	1,200	6.2	6.2
1967	1,168	14	1,182	81	---	81	1,249	6.0	6.4
1968	1,191	13	1,204	105	4	109	1,296	6.0	6.6
1969	1,249	10	1,259	90	1	91	1,339	6.3	6.7
1970	1,385	8	1,393	46	---	46	1,431	6.8	7.1
1971	1,445	7	1,452	75	---	75	1,520	7.0	7.4
1972	1,568	5	1,573	46	---	46	1,614	7.6	7.8
1973	1,657	4	1,661	4	---	4	1,661	7.9	8.0
1974	1,768	3	1,771	43	---	43	1,811	8.4	8.6
1975	1,689	3	1,692	73	---	73	1,762	7.9	8.3
1976	1,908	4	1,912	25	---	25	1,933	8.9	9.1
1977	1,905	7	1,912	117	---	117	2,022	8.8	9.4
1978	2,041	9	2,050	70	---	70	2,111	9.4	9.7
1979 2/	2,107	9	2,116	42	---	42	2,149	9.6	9.8
	Other cheese								
1950	332	1	333	---	---	---	332	2.2	2.2
1955	411	1	412	---	---	---	411	2.5	2.5
1960	524	1	525	---	---	---	524	2.9	2.9
1965	648	5	653	---	---	---	648	3.4	3.4
1966	689	7	696	---	---	---	689	3.6	3.6
1967	720	8	728	---	---	---	720	3.7	3.7
1968	787	7	794	---	---	---	787	4.0	4.0
1969	843	6	849	---	---	---	843	4.2	4.2
1970	886	6	892	---	---	---	886	4.4	4.4
1971	966	5	971	---	---	---	966	4.7	4.7
1972	1,105	5	1,110	---	---	---	1,105	5.3	5.4
1973	1,188	5	1,193	---	---	---	1,188	5.7	5.7
1974	1,260	7	1,267	---	---	---	1,260	6.0	6.0
1975	1,310	7	1,317	---	---	---	1,310	6.2	6.2
1976	1,443	3	1,446	---	---	---	1,443	6.7	6.8
1977	1,491	2	1,493	---	---	---	1,491	6.9	6.9
1978	1,625	2	1,627	---	---	---	1,625	7.5	7.5
1979 2/	1,701	2	1,703	---	---	---	1,701	7.7	7.8

1/ Domestic disappearance, commercial sources. 2/ Preliminary.

Table 11--Per capita consumption of selected cheese varieties, United States, selected years, 1950-79

Year	Swiss 1/	Italian-types 2/	Brick	Muenster	Cream and Neufchatel	Blue 3/	Edam and Gouda	Limburger	Roquefort
					Pounds				
1950	0.70	0.54	0.20		0.46	0.08	0.04	0.04	0.01
1955	.81	.66	.16	.11	.49	.09	.05	.03	.01
1960	.76	1.00	.15	.13	.60	.11	.06	.02	.01
1961	.73	1.02	.13	.13	.60	.11	.07	.02	.01
1962	.74	1.08	.13	.13	.66	.10	.07	.02	.01
1963	.72	1.18	.13	.13	.62	.10	.07	.02	.01
1964	.74	1.30	.12	.15	.63	.11	.07	.02	.01
1965	.73	1.40	.12	.16	.64	.12	.07	.02	.01
1966	.80	1.53	.12	.15	.60	.13	.10	.02	.01
1967	.81	1.59	.11	.15	.62	.12	.10	.01	.01
1968	.93	1.74	.11	.15	.60	.12	.15	.01	.01
1969	.85	1.97	.10	.16	.62	.13	.10	.01	.01
1970	.90	2.09	.10	.17	.63	.14	.11	.01	.01
1971	.95	2.34	.11	.20	.64	.15	.10	.01	.01
1972	1.08	2.65	.11	.22	.65	.16	.11	.01	.01
1973	1.08	2.86	.11	.22	.67	.17	.12	.01	.01
1974	1.21	3.02	.11	.23	.72	.16	.11	.01	.01
1975	1.12	3.31	.09	.25	.76	.16	.11	.01	.01
1976	1.28	3.65	.09	.26	.79	.18	.11	.01	.01
1977	1.24	3.82	.07	.26	.82	.18	.11	.01	.01
1978	1.37	4.17	.08	.27	.92	.19	.12	.01	.01
1979	1.39	4.37	.07	.29	.97	.18	.13	.01	.01

1/ Includes imports of Gruyere and Emmenthaler. 2/ Includes imports of Romano, Pecorino, Reggiano, Parmesano, Provolone, and Provelette. 3/ Includes Gorgonzola.

Table 12--Per capita consumption of Italian-type cheese, by variety, United States, 1972-1979

Variety	1972	1973	1974	1975	1976	1977	1978	1979
				Pounds				
Provolone	.24	.27	.28	.28	.32	.35	.37	.41
Romano	.17	.16	.15	.23	.17	.16	.19	.17
Parmesan	.23	.19	.26	.18	.28	.27	.28	.32
Mozzarella	1.60	1.80	1.90	2.16	2.37	2.53	2.77	2.90
Ricotta	.32	.35	.34	.38	.42	.42	.45	.48
Other	.08	.09	.09	.08	.08	.09	.11	.09

Table 13—Estimated per capita civilian consumption of processed and natural cheese, United States, selected years, 1956-79

Year	Processed	Processed foods and spreads[1]	Total processed and products[2]	Natural[3]	Total natural equivalent
			Pounds		
1956	2.2	1.1	3.3	5.4	8.0
1960	2.5	1.3	3.8	5.3	8.4
1965	3.2	1.2	4.4	5.9	9.5
1970	3.3	2.3	5.6	7.1	11.5
1971	3.6	2.3	5.9	7.5	12.1
1972	3.4	2.7	6.1	8.3	13.2
1973	3.3	2.7	6.1	8.9	13.7
1974	3.5	3.0	6.4	9.6	14.6
1975	3.3	3.4	6.7	9.3	14.5
1976	3.9	2.7	6.5	10.6	15.9
1977	3.6	3.3	6.9	10.9	16.3
1978[4]	3.4	3.3	6.7	11.9	17.1
1979[5]	3.5	3.2	6.7	12.4	17.6

[1] Includes cold pack; excludes spreads from Neufchatel and cream cheese. [2] May not add due to rounding. [3] Consumed in this form. [4] Revised. [5] Preliminary.

With a decline in USDA donations in 1979, the increase in consumption came from greater commercial sales. Higher consumer incomes and changing eating habits contributed to the larger cheese use, despite relatively sharp increases in retail cheese prices in 1979.

With processed cheese consumption unchanged from 1978, civilians consumed an average of 1/2 pound more per person of natural cheese. This continues the long-term trend.

FOREIGN DAIRY TRADE AND TRENDS

Imports Remain Below Year-Ago

U.S. dairy product imports during June-August on a milk equivalent basis were 23 percent less than in 1979 (table 14). Through August, imports were 1.02 billion pounds, down 17 percent compared with 1979.

Imports of quota cheeses from January to August were 72 percent of 1979, while during June-August they were down 27 percent on a product weight basis. Swiss cheese imports during June-August were down 30 percent compared with 1979; through August they were 78 percent of 1979. American-type cheese imports during June-August were up 79 percent; however, for the year-to-date they were down 16 percent. Meanwhile, Italian cheese imports were about even with year-ago levels, while Edam and Gouda imports from January to August were above 1979 by about a fifth.

Of the other dairy imports subject to quota, only chocolate crumb (a chocolate-milk solids mixture) was above 1979 during June-August. For the year only this product was substantially above 1979, while butter, ice cream, nonfat dry milk, and animal feed (with milk solids) are below year-ago levels.

Imports of non-quota cheeses are in general above year-ago levels; however, care must be used, as some applicable data for comparison are lacking for last year. Meanwhile, lactose (milk sugar) imports during June-August were 3 percent below a year-ago, but were 75 percent greater than 1979 through August. Casein imports were up 2 percent in July-August and were 3 percent more by the end of August.

Imports for the rest of 1980 of the generally more expensive foreign cheeses will probably continue to be below year-earlier levels because of little improve-

U.S. dairy trade
(milk equivalent)

Year and quarters	Imports		Exports	Shipments[1]
	Cheese	Other		
	Million pounds			
1979				
1st	251	133	98	150
2nd	432	44	90	167
3rd	517	34	74	143
4th	829	65	100	160
Year[2]	2,028	276	362	620
1980				
1st	224	142	108	135
2nd	321	35	88	139
July-Aug.	287	12	110	[3]36

[1] To U.S. territories. [2] May not add due to rounding. [3] July.

Table 14--Dairy Products: U.S. imports, quota and non-quota, total 1979, and January-August, 1979-80 1/

Product	Calendar year quota	1979 imports	August			Cumulative, January-August		
			1979	1980	1980 as a % of 1979	1979	1980	1980 as a % of 1979
			Thousand pounds		Percent	Thousand pounds		Percent
Cheese, quota types								
American-Cheddar	12,205.3	6/ 10,257	793	1,619	204	4,689	4,700	100
-Other	7,545.4	6/ 7,707	174	226	130	2,228	1,083	49
Italian-Original loaves	12,374.4	6,695	399	370	93	3,836	3,686	96
-Other	1,550.0	997	149	73	49	583	605	104
Edam and Gouda-Natural	9,208.6	8,559	499	735	147	3,818	4,439	116
-Processed	3,151.3	1,283	193	53	27	366	662	181
Blue Mold	5,469.6	4,335	465	638	137	1,953	2,199	113
Swiss-Emmenthaler 2/	70,228.1	75,329	7,382	4,511	61	42,264	31,536	75
-Gruyere process 2/	15,597.2	18,642	2,158	1,412	65	8,577	7,995	93
Other-Over 0.5 % fat 3/	90,192.1	88,626	7,745	4,240	55	43,405	21,538	50
-Under 0.5 % fat 3/	12,621.1	4,869	188	438	233	508	1,807	356
Total	240,143.1	227,299	20,145	14,316	71	112,227	80,250	72
Cheese, non-quota types								
Other cow's milk cheeses 4/		---	---	1,245	---	---	7,528	---
Miscellaneous 5/		1,261	78	50	64	714	402	56
Pecorino		18,400	1,976	1,811	92	10,435	12,636	121
Roquefort		1,328	163	62	38	909	812	89
Total		20,989	2,217	3,168	143	12,058	21,378	177
Total cheese, Quota and Non-quota	240,143.1	248,289	22,360	17,484	78	124,286	101,627	82
Other quota products								
Butter	707.0	6/ 809	105	57	54	413	328	79
Butteroil	1,200.0	1,200	---	---	---	1,200	1,200	100
Butterfat mixtures	2,580.0	2,545	405	---	---	1,497	1,535	103
Ice cream	3,377.3	2,497	---	9	---	1,911	1,159	61
Frozen cream	12,540.0	12,315	596	198	33	9,486	8,357	88
Nonfat dry milk	1,807.0	6/ 2,178	179	40	22	1,806	1,299	72
Dried buttermilk and whey	496.0	317	---	---	---	---	179	---
Evaporated milk	1,312.0	1	1	---	---	1	1	100
Condensed milk	4,079.0	383	35	---	---	245	237	97
Chocolate crumb-Regular	21,409.0	11,651	1,515	1,105	73	5,977	9,650	161
Lowfat	4,680.0	3,446	240	120	50	2,414	1,008	42
Animal feed with milk solids	16,300.0	15,695	2,911	318	11	10,898	8,537	78
Non-quota products								
Casein		150,827	11,770	11,585	98	105,050	107,774	103
Lactose		1,983	450	165	37	1,296	2,269	175
Milk equivalent, fat solids basis, total all products	1,305,620	2,304,681	202,826	149,970	74	1,230,140	1,021,599	83

1/ Preliminary. 2/ 1979 imports include Swiss-types which were not subject to quota prior to January 1, 1980. 3/ 1979 imports include cheeses which prior to January 1, 1980 were not subject to quota. 4/ Primarily soft, ripened cheeses. No applicable comparison to prior years. 5/ Gjetost, Bryndza, Gammelost and Noekkelost, and Goya. 6/ Probable error in reported data.

ment in consumer purchasing power and because importers will likely not build inventories. Imports of lactose, given continued strong demand and the resulting higher prices, will likely continue for 1980. Casein imports, even given the higher world prices, will probably remain near year-ago levels as the price of competing products have also risen.

Milk equivalent exports during April-June at 88.4 million pounds were down slighly from 1979, after being up a tenth during the first quarter. Exports for the January to August period were up 32 percent, with butter, cheese, nonfat and dry whole milk higher while canned milk was down. Milk equivalent shipments to U.S. territories for the January to July period were down 13 percent compared with 1979.

World Milk Production Higher

Increased milk production in the European Community (EC), the United States, Canada, New Zealand and Japan is expected to outweigh a decline in the USSR and Australia, such that 1980 world output will likely be up about 1 percent from 1979. While it is still early, world conditions indicate that milk production for 1981 will likely be equal to or larger than the expected 1980 level.

Milk production in the EC is expected to be up 2 to 3 percent, with France (EC's largest milk producer) up over 4 percent and the Federal Republic of Germany up about 3 percent. This increase will come despite EC's programs to reduce excessive milk production. The programs include an effort to encourage the conversion of dairy enterprises to beef production and a milk producers' tax that was increased this year. In addition, despite a supplementary producer tax to be imposed in 1981, the overall profitability of dairying this year will likely lead to some increase in production in 1981.

Milk production in Canada is likely to be up 4 to 5 percent in response to federal and provincial encouragement to expand output. In 1981, Canadian production is expected to be up by about half of the 1980 increase. New Zealand's milk production from June 1979 to May 1980 was up nearly 7 percent. However, the rate of increase from year-ago levels is expected to abate leaving 1980 production up about 4 percent and 1981 output down slighly to unchanged from the 1980 level. Japanese production for 1980 will likely be up less than 1 percent as efforts to balance supply and demand resulted in a decline in milk cow numbers this year. An increase in output of about 2 percent is expected in 1981.

Lower milk production in the USSR is expected for 1980, and reflects quantity and quality problems with roughage supplies earlier this year because of the poor 1979 harvest. Milk production through July was down 4 percent, but with improved pasture and feed conditions, milk output will likely move above year-ago levels. For all of 1980, output will be down about 2 percent while the outlook for 1981 is for increase production. Meanwhile, Australian output is lower (down 5 percent) because of the decline in cow numbers that was precipitated by a severe drought. Output may only recover moderately in 1981.

World trade in milk and dairy products has remained buoyant despite weakened demand in the developed economies, notably the United States. The USSR has purchased large quantities of butter and also increased its imports of whole milk powder. In addition, the developing countries have continued to buy large amounts of dairy products; notably OPEC, whose imports on a milk equivalent basis will be about 20 percent of world imports.

Given the buoyant trade and increased imports by the developing economies, stocks of butter and skim milk powder in the developed countries are down a sixth and a third respectively—even though U.S. stocks have increased. In fact, EC intervention stocks in July were down about 40 percent while EC stocks of skim milk powder were down about 50 percent.

However, total world stocks for the end of 1980 are forecast to be 8 percent more butter and 5 percent more nonfat dry milk.

Along with the drawdown in world stocks, international prices have risen. In late September, skim milk powder prices were about $1,000 per metric ton f.o.b. compared with $800 at the beginning of the year and the minimum export price of $425 under the GATT (general agreement on tariffs and trade) dairy arrangement. In addition, current international prices of butter, cheese and whole milk powder are well above the GATT minimum prices.

Table 15.--U.S. Dairy Situation at a Glance

Item	Unit or base period	1978	1979					1980		
		Aug.	June	July	Aug.	Sept.	Year	June	July	Aug.
Production and cow numbers:										
Total milk	Mil. lb.	10,188	10,973	10,698	10,439	10,014	123,623	11,409	11,019	10,786
Milk per cow	Lb.	942	1,022	996	971	929	11,471	1,055	1,017	993
Number of milk cows	Thou.	10,813	10,738	10,741	10,755	10,785	10,777	10,812	10,840	10,864
Prices received by farmers:										
All milk, sold to plants, 100 pounds	Dol.	10.50	11.50	11.60	12.00	12.30	12.00	12.50	12.60	12.80
Percentage of parity 1/	Pct.	.75	.75	.75	.75	.74	.74	.74	.73	.71
Manufacturing grade milk, 100 pounds	Dol.	9.62	10.70	10.80	11.10	11.40	11.10	11.70	11.60	11.80
Parity equivalent	Dol.	12.16	14.18	14.18	14.18	14.36	14.11	15.84	16.02	16.19
Fat content	Pct.	3.54	3.55	3.51	3.55	3.64	3.68	3.54	3.50	3.53
Minnesota-Wisconsin (3.5% fat), 100 pounds	Dol.	9.68	10.76	10.87	11.09	11.32	10.91	11.68	11.73	11.86
Milk eligible for fluid market, 100 pounds	Dol.	10.70	11.60	11.80	12.20	12.50	12.20	12.70	12.70	13.00
Price ratios and dairy ration values:										
Milk-feed 2/	Lb.	1.54	1.51	1.43	1.51	1.54	1.54	1.50	1.47	1.42
Manufacturing grade milk-hog	Lb.	.20	.27	.28	.31	.31	.27	.35	.28	.26
Manufacturing grade milk-beef	Lb.	.19	.16	.16	.18	.17	.17	.19	.18	.18
Value of concentrate ration fed milk cows	Dol.	5.93	---	6.69	---	---	6.68	---	7.10	---
Farm cash receipts from dairy products	Mil. dol.	1,049	1,258	1,243	1,238	1,215	14,750	1,374	1,382	N.A.
Production of factory products:										
Butter	Mil. lb.	63.2	83.0	72.5	64.3	60.5	984.6	93.8	85.0	77.7
American cheese, whole milk	Mil. lb.	165.6	209.7	193.0	180.3	167.7	2,187.7	223.1	205.9	192.7
Cheese, other than American	Mil. lb.	120.9	134.1	125.8	128.7	122.9	1,527.6	131.1	123.5	124.0
Canned milk, unskimmed	Mil. lb.	69.0	80.3	71.9	67.7	62.2	796.1	69.1	66.9	57.8
Dry whole milk	Mil. lb.	5.7	7.8	6.6	7.6	5.6	85.3	7.1	7.4	6.2
Frozen products 3/	Mil. gal.	124.6	118.0	117.4	122.4	99.6	1,152.9	117.6	126.9	119.7
Creamed cottage cheese	Mil. lb.	76.6	73.6	72.2	73.6	66.3	837.8	70.2	75.1	71.9
Total whole milk equivalent 4/	Mil. lb.	5,317	6,265	5,834	5,550	4,925	65,839	6,580	6,339	5,897
Nonfat dry milk, human use	Mil. lb.	75.7	112.0	95.4	79.8	55.9	908.7	132.6	122.1	102.1
Wholesale prices:										
Butter, Grade A, Chicago, pound	Ct.	116.7	121.8	122.7	128.7	127.8	122.4	139.0	139.3	144.5
Cheese, American (40-pound blocks), f.o.b. Wisconsin assembling points, pound	Ct.	109.1	121.8	123.7	128.5	131.5	123.8	130.9	130.8	132.6
Evaporated milk, case	Dol.	16.26	17.89	17.90	17.97	18.30	17.92	19.83	19.83	19.83
Dry whole milk, pound	Ct.	90.7	99.2	101.2	103.3	105.0	101.4	108.9	110.6	111.4
Nonfat dry milk, pound	Ct.	71.5	79.5	79.7	80.1	80.7	80.0	88.8	88.9	89.3
Dairy products (BLS)	1967=100	190.8	208.4	209.0	215.2	218.3	211.2	229.9	230.5	233.0
Retail prices (BLS):										
Consumer price index 5/	1967=100	197.7	216.6	218.9	221.1	223.4	217.4	247.6	247.8	249.4
All food 5/	1967=100	215.4	235.4	236.9	236.3	237.1	234.5	252.0	254.8	258.7
All dairy products 5/	1967=100	186.1	205.5	206.3	208.6	211.3	207.1	227.2	228.6	229.7
Fluid milk and cream	12/77=100	105.1	115.7	116.1	117.7	119.0	116.8	127.1	127.7	127.9
Whole milk	1967=100	172.1	189.4	190.0	192.8	195.4	191.4	208.6	209.4	209.8
Other	12/77=100	105.1	115.6	116.3	117.4	118.1	116.4	126.0	126.9	127.1
Manufactured dairy products	12/77=100	105.3	116.8	117.3	118.2	120.1	117.4	130.4	131.4	132.5
Butter	1967=100	180.7	199.9	200.6	203.0	209.9	202.9	225.0	226.9	231.2
Cheese	12/77=100	104.8	116.9	117.7	118.4	120.1	117.7	128.8	130.0	130.4
Frozen desserts	12/77=100	105.5	116.9	117.0	117.8	120.1	117.0	133.7	134.6	137.0
Other	12/77=100	105.1	114.5	114.5	115.4	115.5	114.0	127.3	127.5	128.3
Margarine	1967=100	230.9	239.1	240.2	240.3	245.5	240.3	249.0	247.0	249.3
Stocks, end of month:										
Creamery butter	Mil. lb.	284.6	260.1	258.3	239.1	220.4	---	289.4	301.0	295.3
Cheese, total 6/	Mil. lb.	523.5	529.6	562.7	558.8	551.2	---	602.2	652.9	673.0
Canned milk, unskimmed	Mil. lb.	134.4	117.1	134.9	131.9	129.5	---	116.3	128.2	132.4
Dry whole milk	Mil. lb.	9.3	8.6	8.2	7.2	6.1	---	6.3	6.5	4.2
Total whole milk equivalent 7/	Mil. lb.	11,179	10,614	10,928	10,487	10,027	---	11,871	12,624	12,706
Nonfat dry milk	Mil. lb.	700.7	538.3	558.8	560.4	549.6	---	548.4	540.7	582.6
Commercial disappearance:										
Creamery butter	Mil. lb.	69.8	68.1	72.5	66.2	63.4	895.0	60.0	77.1	81.6
Cheese, American	Mil. lb.	167.4	194.3	156.2	182.3	171.5	2,110.9	159.2	149.3	169.0
Cheese, other than American	Mil. lb.	143.1	145.5	141.1	152.3	147.0	1,730.7	141.3	137.2	139.7
Canned milk, unskimmed	Mil. lb.	53.3	52.4	52.8	69.5	63.6	773.7	58.1	52.6	52.4
Milk in all products	Mil. lb.	10,265	10,353	10,220	10,507	10,119	120,372	9,946	10,183	10,570
Nonfat dry milk	Mil. lb.	78.2	44.4	59.2	78.0	60.1	603.1	33.3	45.4	62.6
USDA net removals:										
Butter	Mil. lb.	-6.0	8.1	-1.0	-2.4	---	81.6	44.5	11.6	-2.7
Cheddar cheese	Mil. lb.	3.5	2.2	8.3	.3	---	40.2	57.0	62.0	45.3
Nonfat dry milk	Mil. lb.	18.8	49.8	41.4	15.0	10.0	255.3	103.1	96.2	48.5
Evaporated milk	Mil. lb.	1.5	1.1	1.5	1.2	1.1	16.4	1.0	2.4	1.5
Total whole milk equivalent	Mil. lb.	-86	192	65	-44	2	2,119	1,483	857	395
Fluid sales, change from year earlier: 8/										
Whole milk	Pct.	-2.9	- .9	-2.2	-2.0	-4.8	-2.9	-4.4	-3.2	N.A.
Low-fat and skim milk	Pct.	+3.4	+3.6	+3.8	+4.8	+4.4	+4.4	+3.1	+3.4	N.A.
Total fluid milk	Pct.	- .7	+ .9	+ .1	+ .5	-1.5	- .2	-1.7	- .7	N.A.
Cream and cream mixtures	Pct.	-4.8	0	+ .4	+ .8	+ .6	+1.3	+ .8	N.A.	N.A.

1/ Seasonally adjusted prices as percentage of parity price.
2/ Different series than formerly published.
3/ Ice cream, ice milk, and sherbet.
4/ Includes manufactured products for which current monthly series are available.
5/ For all urban consumers starting January 1978.
6/ Natural, plus process American cheese held by CCC.
7/ Excludes cream and bulk condensed milk.
8/ Daily average sales in Federal and State Marketing areas.
9/ Less than 50,000 pounds.
N.A. Not Available

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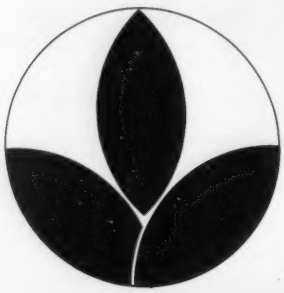
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